

AMENDMENTS IN THE CLAIMS

Pursuant to the Notice set forth in the February 25, 2003, Official Gazette (No. 1267-4) and in accordance with the procedure set forth therein, the following amendment includes a marked-up complete listing of amended claims. This complete listing includes cumulative amendments made through the present submission.

Please amend the claims as follows, and cancel claim 5 without prejudice or disclaimer as to the subject matter recited therein:

1. (Original) A reduction gear mechanism comprising at least first and second axes which extend parallel to each other;

wherein one of said first and second axes rotatably supports at least two gears arranged one after the other in the axial direction thereof, said at least two gears being independently rotatable with respect to each other, and the other of said first and second axes rotatably supports at least one gear, and

wherein said gears provided on said first and second axes are engaged with each other in such a manner that said gear supported on one of said first and second axes successively and alternatively engages with said gear supported on the other of said first and second axes, wherein all of said gears supported by the first and second axes are identical to each other.

2.(Original) The reduction gear mechanism according to claim 1, wherein said each of said first and second axes rotatably supports two gears arranged one after the other in the axial direction thereof.

3.(Original) The reduction gear mechanism according to claim 1, wherein each of said gears supported by said parallel central axes is a double gear having a larger gear portion and

a smaller gear portion, the smaller gear portion of said double gear supported by one of said central axes engaging with the larger gear portion of said double gear supported by the other central axis.

4.(Original) The reduction gear mechanism according to claim 3, wherein in each of said double gears, the larger gear engages with a preceding gear and the smaller gear engages with a succeeding gear, with respect to the direction of driving transmission.

5. (Cancelled)

6.(Currently amended) The reduction gear mechanism according to claim 1, wherein said reduction gear mechanism is arranged in a zoom lens barrel having an optical axis direction.

7.(Original) The reduction gear mechanism according to claim 6, wherein said zoom lens barrel comprises:

a bi-directional motor;

a first sub-lens frame and a second sub-lens frame for supporting a first sub-lens group and a second sub-lens group, respectively, said first and second sub-lens groups functioning optically in a mutually close position and in a mutually distant position, in the optical axis direction; and

a sub-lens group driving mechanism which moves said first and second sub-lens frames to said mutually close and distant positions, and moves said first and second sub-lens frames integrally in the optical axis direction in said mutually close and distant positions, as said bi-directional motor is actuated;

wherein said reduction gear mechanism is provided between said bi-directional motor and said sub-lens group driving mechanism in said zoom lens barrel.

8.(Currently amended) A reduction gear mechanism comprising:

at least two gear supporting axes which extend parallel to each other; and

at least three gears, a first gear and a third gear thereof being rotatably supported on said first gear supporting axis at different positions in an axial direction, said first and third gears being independently rotatable with respect to each other, and a second gear thereof being rotatably supported on said second gear supporting axis, wherein said first gear engages with said second gear, and said second gear engages with said first gear and said third gear, wherein all of said at least three gears supported by the first and second gear supporting axes are identical to each other.

9. (Currently amended) The reduction gear mechanism according to claim 8, further comprising a forth fourth gear which is rotatably supported on said second gear supporting axis at a different position in the axial direction with respect to said second gear, said forth fourth gear being independently rotatable with respect to said second gear, and wherein said third gear engages with said second gear and said fourth gear.

10. (New) A reduction gear mechanism for a camera zoom lens barrel having an optical axis direction, comprising:

at least first and second axes which extend parallel to each other and parallel to the optical axis direction;

at least four identical double gears;

at least two of the identical double gears being arranged immediately adjacent each other, and being independently rotatable with respect to each other, along said optical axis direction on said first axis;

at least another two of the identical double gears being arranged immediately adjacent each other, and being independently rotatable with respect to each other, along said optical axis direction on second axis, said identical double gears arranged on said second axis being

successively and alternatively engaged with said identical double gears arranged on said first axis.

11. (New) The reduction gear mechanism for a camera zoom lens barrel according to claim 10,

wherein said camera zoom lens barrel comprises a bi-directional motor, a first sub-lens frame, a second sub-lens frame, and a sub-lens group driving mechanism, said sub-lens group driving mechanism, depending on a direction of rotation of said bi-directional motor, moving said first and second sub-lens frames to mutually close and mutually distant positions and moving said first and second sub-lens frames integrally in the optical axis direction while in said mutually close and distant positions,

said reduction gear mechanism being provided between said bi-directional motor and said sub-lens group driving mechanism.

12. (New) A reduction gear mechanism of a camera zoom lens barrel having an optical axis direction, a circumferential direction about the optical axis direction, a bi-directional motor, and an actuator ring, in which a space is defined in the circumferential direction between the bi-directional motor and the actuator ring, the reduction gear mechanism comprising:

at least first and second axes which extend parallel to each other and parallel to said optical axis direction, and which are arranged along said circumferential direction within said space;

at least four identical double gears, at least two of the identical double gears being arranged immediately adjacent each other, and being independently rotatable with respect to each other, along said first axis, and at least another two of the identical double gears being arranged immediately adjacent each other, and being independently rotatable with respect to each other, along said second axis, said identical double gears arranged on said second axis